

NOTES ON THE ECOLOGY OF HYDROPORUS  
RUFIPLANULUS FALL (COLEOPTERA,  
DYTISCIDÆ)

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*Hydroporus rufiplanulus* was described in 1923 by the late Dr. H. C. Fall on pages 53-54 of his "Revision of the North American Species of *Hydroporus* and *Agaporus*." The original type series contained only seven specimens, six of which had been collected by the late Wm. T. Davis at Rock City, Cattaraugus Co., N. Y., while the seventh specimen came from Peekskill, N. Y. (Sherman Coll.). Inasmuch as no information regarding the habitat of this species appears to be available, the following notes may prove of interest to students of the *Dytiscidæ*.

On August 16, 1940, the writer collected about a dozen specimens of *H. rufiplanulus* in water-soaked moss at the margin of a small spring in New Lebanon, N. Y. The town of New Lebanon is located in Columbia County, N. Y., and its eastern boundary lies along the New York-Massachusetts state line. This region is intersected by the Taconic Mountains and the topography is rough and hilly, with numerous springs scattered along the hill-sides.

The particular spring in which the specimens of *rufiplanulus* were collected, was located near the foot of a long, sloping meadow about a dozen yards above the margin of a densely wooded area. The beetles were not found in water, but were secured by pressing firmly down upon the moss until the water was forced to the surface. After the pressure was released the small reddish beetles appeared crawling upon the surface of the moss.

Later, after the specimens had been identified,<sup>1</sup> the importance

<sup>1</sup> In November, 1945, through the kindness of Dr. Joseph Bequaert, of the Museum of Comparative Zoology, Cambridge, Mass., I was able to verify this identification by comparison with the Fall types.

of recording the conditions under which they were found became apparent. Several subsequent trips were made to the spring but no additional specimens of *rufiplanulus* were found until July 24, 1946. On this date nine additional specimens were collected under precisely the same conditions as those described above. At this time there was a sedge intermingled with the moss, and this has been identified through the kindness of Dr. H. D. House, State Botanist, as *Juncus canadensis* J. Gay. Likewise, through the cooperation of Dr. House, the moss has been identified by Dr. A. J. Grout of Newfane, Vermont, as *Bryum pseudotriquetrum* (Hedw.) Schwaeger. The temperature of the water on July 24 was 52 degrees Fahrenheit.

The following Coleoptera were collected in association with *Hydroporus rufiplanulus* on the latter date: *Dytiscidæ*: *Hydroporus filiolus* Fall, 3 specimens; *Hydrophilidæ*: *Cymbiodyta blanchardi* Horn, 21 specimens; *Cymbiodyta vindicata* Fall, 1 specimen; *Anacæna limbata* Fab., 6 specimens; and *Paracymus subcupreus* Say, 10 specimens.